International Application No.
International Filing Date
Name of receiving Office and "PCT International Application"

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REQUEST The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty. Applicant's or agent's file reference (if desired) (12 characters maximum) TITLE OF INVENTION Box No. I POLYOLEFIN MEMBRANE WITH INTEGRALLY ASYMMETRICAL STRUCTURE AND PROCESS FOR PRODUCING SUCH **MEMBRANE** Box No. II **APPLICANT** This person is also inventor Name and address: (Family name followed by given name; for a legal entity, full official designation. Telephone No. (0202) 324214 The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) Facsimile No. (0202) 324224 Teleprinter No. Oehder Strasse 28 42289 Wuppertal Applicant's registration No. with the Office State (that is, country) of nationality: State (that is, country) of residence: Germany Germany all designated States except the the United States the States indicated in the This person is applicant all designated States United States of America of America only Supplemental Box for the purposes of: Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Name and address: (Family name followed by given name; for a legal entity, full official designation. This person is: The address must include postal code and name of country. The country of the address indicated in this applicant only Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) applicant and inventor KESSLER, Erich Breubergstrasse 23 inventor only (If this check-box 64739 Hochst i. Odw. is marked, do not fill in below.) Applicant's registration No. with the Office State (that is, country) of nationality: State (that is, country) of residence: Germany Germany the States indicated in the This person is applicant for all designated all designated States except the United States the United States of America of America only Supplemental Box the purposes of: States Further applicants and/or (further) inventors are indicated on a continuation sheet. BOX NO. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE The person identified below is hereby/has been appointed to act on behalf of the X agent common representative applicant(s) before the competent International Authorities as: Telephone No. Name and address: (Family name followed by given name; for a legal entity, full official (0202) 32 4213 designation. The address must include postal code and name of country.) FETT, Gunter CPW GmbH Facsimile No. Kasinostrasse 19-21 (0202) 32 4224 42103 Wuppertal Teleprinter No. DF. Agent's registration No. with the Office Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)				
If none of the following sub-boxes is used, this sheet should not be included in the request.	<u>-</u> .			
Name and address: (Family name followed by given name; for a legal entity, full official designation The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) BATZILLA, Thomas Konigsberger Strasse 16 63927 Burgstadt				
Control of the Contro				
State (that is, country) of nationality: Germany State (that is, country) of reference to the state (that is,	Germany			
	United States America only the States indicated in the Supplemental Box			
Name and address: (Family name followed by given name; for a legal entity, full official designation The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) WECHS, Friedbert Bayernstrasse 26 63939 Worth	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office			
State (that is, country) of nationality: Germany State (that is, country) of re	esidence: Germany			
This person is applicant for all designated all designated States except the	United States America only the States indicated in the Supplemental Box			
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) WIESE, Frank Oehderstrasse 23 B 42289 Wuppertal This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)				
	Applicant's registration No. with the Office			
State (that is, country) of nationality: Germany State (that is, country) of re	esidence: Germany			
	United States the States indicated in the Supplemental Box			
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office				
State (that is, country) of nationality: State (that is, country) of re	sidence:			
This person is applicant for all designated all designated States except the United States of America of America only Supplemental Box				
Further applicants and/or (further) inventors are indicated on another continuation sheet.				

box No. V DESIGNATION OF STATES Wark the applicable check-boxes below; at least one must be marked.								
The following designations are hereby made under Rule 4.9(a):								
Regi	onal	Patent						
⊠	AP	ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (if other kind of protection or treatment						
\boxtimes	EA	desired, specify on dotted line) Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State						
	EP	of the Eurasian Patent Convention and of the PCT European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, HU Hungary, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal,						
\boxtimes	OA	 RO Romania, SE Sweden, SI Slovenia, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, 						
		NE Niger, SN Senegal, TD Character of the PCT (if other kind of	ad, To	G Tog tection	o, and any other State which is a r or treatment desired, specify on de	nemb o <i>tted</i>	oer Sta <i>line)</i>	te of OAPI and a Contracting
Natio	onal P	atent (if other kind of protection of						
\boxtimes	AE	United Arab Emirates	\boxtimes	HR	Croatia	\boxtimes		Oman
		Antigua and Barbuda		HU	Hungary		PG	Papua New Guinea
	AL	Albania		ID	Indonesia	X	PH	Philippines
H	AM	Armenia	爿	IL IN	Israel		PL	Poland
	AU	AustriaAustralia		IS	IndiaIceland	H	PT RO	PortugalRomania
×	AZ	Azerbaijan	X	JP	Japan		RU	Russian Federation
×	BA	Bosnia and Herzegovina	껆	KE	Kenya		KU	Russian redefation
	DA		X	KG	Kyrgyzstan	\boxtimes	SC	Seychelles
\boxtimes	BB	Barbados	\boxtimes	KP	Democratic People's	×	SD	Sudan
×		Bulgaria		171	Republic of Korea		SE	Sweden
	BR	Brazil	∇	KR	Republic of Korea	×	SG	Singapore
	BY	Belarus	\boxtimes	KZ	Kazakhstan		SK	Slovakia
×	BZ	Belize	X	LC	Saint Lucia		SL	Sierra Leone
×		Canada	\boxtimes	LK	Sri Lanka	×	SY	Syrian Arab Republic
×		& LI Switzerland and	×	LR	Liberia	ద	TJ	Tajikistan
K-31		Liechtenstein	×	LS	Lesotho	X	TM	Turkmenistan
M	CN	China	X	LT	Lithuania		TN	Tunisia
\boxtimes	CO	Colombia	×	LU	Luxembourg	X	TR	Turkey
X	CR	Costa Rica	X	ĹV	Latvia	\boxtimes	TT	Trinidad and Tobago
\boxtimes	CU	Cuba	ă	MA	Morocco	4.3		Timidad and Tobago
\boxtimes	CZ	Czech Republic	Ħ	MD	Republic of Moldova	\boxtimes	TZ	United Republic of Tanzania
×	DE	Germany	تے			×	UA	Ukraine
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\boxtimes	\mathbf{DZ}	Algeria			Republic of Macedonia	_		
\boxtimes	EC	Ecuador			***************************************	\boxtimes	UZ	Uzbekistan
\boxtimes	EE	Estonia	\boxtimes	MN	Mongolia	$\overline{\boxtimes}$	VC	Saint Vincent and the
\boxtimes	ES	Spain	茵	MW	Malawi		_	Grenadines
\boxtimes	FI	Finland		MX	Mexico	\boxtimes	VN	Viet Nam
\boxtimes	GB	United Kingdom	\square	MZ	Mozambique		YU	Serbia and Montenegro
\boxtimes	GD	Grenada	$\overline{\boxtimes}$	NI	Nicaragua	\boxtimes	ZA	South Africa
	GE	Georgia			Norway	\boxtimes	ZM	Zambia
\boxtimes	GH	Ghana	\boxtimes	NZ	New Zealand	\boxtimes	$\mathbf{Z}\mathbf{W}$	Zimbabwe
\boxtimes	GM	Gambia				_		
Check-boxes reserved for designating States which have become party to the PCT after issuance of this sheet:								
\boxtimes	VC	St. Vincent and the	\boxtimes	SC	Seychelles			
	<u>Grenadines</u>							
Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all								

other designations which would be permitted under the PCT except the designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORIT	TY CLAIM	· · · · · · · · · · · · · · · · · · ·					
The priority of the foll	owing earlier application	on(s) is hereby claimed:					
Filing date	Number	Where earlier application is:					
of earlier application (day/month/year)	of earlier application	national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office			
item (1) 24 January 2002	10202594.0	Germany					
item (2)							
item (3)							
item (4)							
item (5)							
Further priority cl	aims are indicated in the S	Supplemental Box.					
The receiving Office is a (only if the earlier applied Office) identified above a	cation was filed with the	ransmit to the Internationa Office which for the purp	al Bureau a certified copy of oses of this international ap	f the earlier application(s) oplication is the receiving			
all items item (1) item (2) item (3) item (4) item (5) other, see Supplemental Box							
*Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)):							
				•••••			
Box No. VII INTERNA	ATIONAL SEARCHING	G AUTHORITY					
Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used): ISA /							
			arch has been carried out by o	r requested from the International			
Date (day/month/year)	Number		Country (or regional Offi	ice)			
Box No. VIII DECLARATIONS							
The following declarations a	are contained in Boxes Nos. V of each type of declaration):	TII (i) to (v) (mark the applica	ble check-boxes below and indic	cate in Number of declarations			
Box No. VIII (i)							
Box No. VIII (ii)	Box No. VIII (ii) Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent:						
Box No. VIII (iii)	Box No. VIII (iii) Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application:						
Box No. VIII (iv)	No. VIII (iv) Declaration of inventorship (only for the purposes of the designation of the United States of America) :						
Box No. VIII (v)	ox No. VIII (v) Declaration as to non-prejudicial disclosures or exceptions to lack of novelty:						

Box No. IX CHECK LIST; LANGUAGE OF FILING						
This international application contains:	This international application is accompanied by the					
(a) in paper form, the following number of sheets:	item(s) (mark the applicable check-boxes below and right column the number of each item):	indicate in of items				
request (including declaration sheets) : 4 description (excluding sequence listings and/or tables related thereto) : 35 claims : 4 abstract : 1 drawings : 5 Sub-total number of sheets : 49	 ∫ fee calculation sheet original separate power of attorney original general power of attorney copy of general power of attorney; reference if any: statement explaining lack of signature priority document(s) identified in Box No. V item(s): translation of international application into (language): 	: : I as				
sequence listings tables related thereto (for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c) below)	 8. separate indications concerning deposited microorganism or other biological material 9. sequence listing in computer readable form (a type and number of carriers) (i) copy submitted for the purposes of intern search under Rule 13ter only (and not as 	: indicate ational				
Total number of sheets : 49 (b) only in computer readable form (Section 801(a)(i)) (i) sequence listings (ii) tables related thereto (c) also in computer readable form	the international application) (ii) (only where check-box (b)(i) or (c)(i) is min left column) additional copies including applicable, the copy for the purposes of international search under Rule 13ter (iii) together with relevant statement as to the	: narked g, where :				
(Section 801(a)(ii)) (i) sequence listings (ii) tables related thereto Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the	of the copy or copies with the sequence limentioned in left column 10. tables in computer readable form related to so listings (indicate type and number of carriers (i) copy submitted for the purposes of intern search under Section 802(b-quater) only as part of the international application)	: equence s) ational				
sequence listings tables related thereto (additional copies to be indicated under item 9(ii), in right column)	(ii) (only where check-box (b)(ii) or (c)(ii) is in left column) additional copies includin applicable, the copy for the purposes of international search under Section 802(b-(iii) together with relevant statement as to the copy or copies with the tables mentioned 11. other (specify):	g, where -quater) : identity of the in left column :				
Figure of the drawings which	Language of filing of the					
should accompany the abstract: international application: German Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request). A. Muth (AV 41643)						
For receiving Office use only						
1. Date of actual receipt of the purported						
international application: 08 January 2003 3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		Drawings: received:				
4. Date of timely receipt of the required corrections under PCT Article 11(2): 5. International Searching Authority (if two or more are competent): ISA /	6. Transmittal of search copy delayed until search fee is paid	not received:				
Date of receipt of the record copy by the International Bureau:	For International Bureau use only					